

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  NO 7539/WO	<b>FOR FURTHER ACTION</b>  see Form PCT/ISA/220 as well as, where applicable, Item 5 below.	
International application No.  PCT/EP2004/006614	International filing date (day/month/year)  18/06/2004	(Earliest) Priority Date (day/month/year)  23/06/2003
Applicant  NESTEC S.A.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 8 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the International search was carried out on the basis of the International application in the language in which it was filed, unless otherwise indicated under this item.



The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).



b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the International application, see Box No. I.

2.



**Certain claims were found unsearchable** (See Box II).

3.



**Unity of invention is lacking** (see Box III).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

INFANT OR FOLLOW-ON FORMULA

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this International search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. \_\_\_\_\_



as suggested by the applicant.



as selected by this Authority, because the applicant failed to suggest a figure.



as selected by this Authority, because this figure better characterizes the invention.

- b. ☒

none of the figures is to be published with the abstract.

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/006614

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A23L1/29 A23L1/30 A23L1/305 A61K35/74

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A23L A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, FSTA, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 048 226 A (NESTLE SA) 2 November 2000 (2000-11-02) the whole document	1-21
Y	US 5 916 621 A (SAWATZKI GUENTHER ET AL) 29 June 1999 (1999-06-29) claims 1-12	1-21
Y	EP 1 228 707 A (CAMPINA MELKUNIE BV) 7 August 2002 (2002-08-07) pages 2-3; claims 1-10	1-21
Y	US 2003/077255 A1 (SABHARWAL HEMANT K) 24 April 2003 (2003-04-24) page 2, paragraph 14; claims 1-12	1-21
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

30 September 2004

Date of mailing of the international search report

11/10/2004

Name and mailing address of the ISA

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De Jong, E

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/006614

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 904 784 A (NUTRICIA NV) 31 March 1999 (1999-03-31) column 8, paragraph 58 - column 9, paragraph 64; example 7 -----	1-21
Y	WO 02/15719 A (NESTLE SA) 28 February 2002 (2002-02-28) example 6 -----	1-14
Y	US 2003/017192 A1 (KANAFANI HANNY ET AL) 23 January 2003 (2003-01-23) page 1, paragraphs 5,6; claims 1-25; example 3 -----	1-14
Y	OGATA T ET AL: "EFFECT OF BIFIDOBACTERIUM LONGUM BB536 YOGHURT ADMINISTRATION ON THE INTESTINAL ENVIRONMENT OF HEALTHY ADULTS" MICROBIAL ECOLOGY IN HEALTH & DISEASE, CHICHESTER, GB, vol. 11, no. 1, March 1999 (1999-03), pages 41-46, XP009023764 the whole document -----	4,7, 15-21
Y	GRILL J P ET AL: "Bifidobacteria and probiotic effects: action of Bifidobacterium species on conjugated bile salts." CURRENT MICROBIOLOGY 1995 CORRESPONDENCE (REPRINT) ADDRESS, J. BALLONGUE, LAB. DE CHIMIE BIOL., INST. HENRY TISSIER, UNIV. DE NANCY I, BP 239, 54506 VANDOEUVRE LES NANCY, FRANCE, vol. 31, no. 1, 1995, page 23, XP008036111 the whole document -----	4,7, 15-21
Y	ISOLAURI E ET AL: "Probiotics in the management of atopic eczema" CLINICAL AND EXPERIMENTAL ALLERGY, vol. 30, no. 11, November 2000 (2000-11), pages 1604-1610, XP002298117 ISSN: 0954-7894 the whole document -----	5-7, 15-21
Y	WO 02/060276 A (MAEYRAE-MAEKINEN ANNIKA ; SUOMALAINEN TARJA (FI); VALIO LTD (FI); VAAR) 8 August 2002 (2002-08-08) the whole document -----	5-7, 15-21
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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/006614

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	SAXELIN M: "LACTOBACILLUS GG - A HUMAN PROBIOTIC STRAIN WITH THOROUGH CLINICAL DOCUMENTATION" FOOD REVIEWS INTERNATIONAL, NEW YORK, NY, US, vol. 13, no. 2, 1997, pages 293-313, XP000199732 pages 296-297 pages 310-304	5-7, 15-21
Y	KALLIOMAKI M ET AL: "Probiotics and prevention of atopic disease: 4-year follow-up of a randomised placebo-controlled trial" LANCET THE, LANCET LIMITED. LONDON, GB, vol. 361, no. 9372, 31 May 2003 (2003-05-31), pages 1869-1871, XP004428374 ISSN: 0140-6736 the whole document	5-7, 15-21
Y	US 2002/004527 A1 (O' CONNOR DEBORAH L ET AL) 10 January 2002 (2002-01-10) pages 1-10; claims 1-21	1,12,13
A	DE 202 02 562 U (ORTHOMOL PHARMAZEUTISCHE VERTR) 23 May 2002 (2002-05-23) claims 1,2	3
A	MATSUMOTO M ET AL: "ADHESIVE PROPERTY OF BIFIDOBACTERIUM LACTIS LKM512 AND PREDOMINANT BACTERIA OF INTESTINAL MICROFLORA TO HUMAN INTESTINAL MUCIN" CURRENT MICROBIOLOGY, NEW YORK, NY, US, vol. 44, no. 3, 2002, pages 212-215, XP008024172 ISSN: 0343-8651 page 212 page 215	3
A	BRUCK W M ET AL: "A two-stage continuous culture system to study the effect of supplemental alpha-lactalbumin and glycomacropeptide on mixed cultures of human gut bacteria challenged with enteropathogenic Escherichia coli and Salmonella serotype typhimurium." JOURNAL OF APPLIED MICROBIOLOGY, vol. 95, no. 1, 2003, pages 44-53, XP002261744 ISSN: 1364-5072 the whole document	1
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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/006614

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EP 0 880 902 A (NESTLE PRODUKTE AG) 2 December 1998 (1998-12-02) cited in the application the whole document -----</p>	1

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2004/006614

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 15-21(partly)  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 15-21 are directed to a method of treatment of the human body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/006614

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/006614

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WO 02060276	A	BR 0206689 A CA 2434337 A1 CN 1487798 T CZ 20031915 A3 EE 200300351 A EP 1359816 A1 WO 02060276 A1 HU 0401017 A2 JP 2004524836 T NO 20033283 A US 2004062758 A1	03-02-2004 08-08-2002 07-04-2004 14-01-2004 15-12-2003 12-11-2003 08-08-2002 30-08-2004 19-08-2004 24-09-2003 01-04-2004
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